

# Newsletter 26 of EUROPT

EUROPT - The Continuous Optimization Working Group of EURO

http://www.iam.metu.edu.tr/EUROPT/

 $February\ 2012$ 

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# Words from the chair

Dear Members of EUROPT,

I hope the year 2012 has started well for you. First of all, I would like to remind you that the 10th EUROPT Workshop on Advances on Continuous Optimization, EUROPT 2012, will be organized in Shiauliai, Lithuania on July 5-7, 2012. The call for abstracts can be found in this newsletter and further information is available at <a href="http://www.mii.lt/EUROPT-2012/">http://www.mii.lt/EUROPT-2012/</a>. Please, remember that the deadline for abstract submission is April 30, 2012.

For several years, the highlight of EUROPT workshops has been the recognition of the efforts and contribution of some professional in the field of continuous optimization with the EUROPT Fellow title. The managing board of EUROPT has considered the candidates nominated and decided to award Prof. Joaquim João Judice from Portugal <a href="http://www.co.it.pt/judice/">http://www.co.it.pt/judice/</a> with the EUROPT Fellow 2012 recognition. The EUROPT Fellow 2012 will give a EUROPT Fellow Plenary talk in the workshop in Shiauliai and more information about him will be given in the Newsletter which will be published after the Workshop.

Information about the many conferences, workshops and summer schools to be organized this year can be found in this newsletter. Please, note that there is still time to submit an abstract for the EURO XXV International Conference which will be organized in Vilnius, Lithuania on July 8-11, 2012 (http://www.euro-2012.lt). It takes place immediately after the EUROPT 2012 workshop and we encourage as many of you as possible to take part in both these events. As all EURO conferences, EURO 2012 will be a big event and provides an excellent opportunity to hear about the latest research interests and results as well as meet colleagues and establish new networks.

If you know a colleague who is not yet a member of EUROPT, please, invite new members to EUROPT. Becoming a member is simple: all that is needed is filling the form at <a href="http://anadolu.lib.metu.edu.tr/EUROPT/h\_newuser.php">http://anadolu.lib.metu.edu.tr/EUROPT/h\_newuser.php</a>. Remember that EUROPT has no membership fees!

IMPORTANT: The two-year term of the current managing board of EUROPT will end this summer. You will receive later instructions of how to vote in the managing board election. However, this is the time to express your interest if you are interested in serving EUROPT as a member of the managing board! Please, let me know by the end of March if you are interested!

With best wishes, Kaisa Miettinen, Chair of EUROPT

University of Jyväskylä, Finland and Royal Institute of Technology, Stockholm, Sweden kaisa.miettinen@jyu.fi

# EUROPT Workshop 2012 and EURO XXV (reminders)

# 10th EUROPT Workshop on Advances in Continuous Optimization Shiauliai, Lithuania July 5-7, 2012

http://www.mii.lt/EUROPT-2012

Call. The Organizers of the 10th EUROPT Workshop on Advances in Continuous Optimization (EUROPT-2012) have a pleasure inviting you to take part in this workshop. We welcome abstracts related to any aspects of continuous optimization, in particular, related to the topics listed below. Abstracts must be written in English and contain no more than 600 characters (no formulas or mathematical notations are allowed). Each attendee is allowed to present ONE paper at the conference. To submit an abstract, use the abstract submission system of EURO-Online at <a href="http://www.euro-online.org/conf/europt2012/?page=welcome">http://www.euro-online.org/conf/europt2012/?page=welcome</a>.

Topics. The programme of our Workshop consists of tutorials, invited and contributed papers. We encourage those interested in e.g. the following topics to participate: convex optimization and generalized convexity; local nonlinear optimization; global nonlinear optimization; optimal control - theory and applications; multiobjective optimization; conic optimization and semidefinite programming; semiinfinite optimization; robust optimization; stochastic optimization; large-scale methods in global search; optimization in data mining; data visualization for optimal decisions; applications of continuous optimization to combinatorial problems; optimization in industry, business and finance; supply chain management; analysis and engineering of algorithms; software development.

Location and Venue. The Workshop will be hosted by Siauliai University. The registration will take place in the Faculty of Mathematics and Informatics (P. Visinskio st. 19, Siauliai). The Sessions will take place in the Library of Siauliai University (Vytauto st. 84, Siauliai). The city Siauliai is located about 250 km from Vilnius, the capital of Lithuania. The participants who wish will be transferred from Vilnius to Siauliai and back to Vilnius by bus (about 3 hours). The bus departs from Vilnius on July 4, at 18:00, and comes back from Siauliai on July 7, at 12:00. Vilnius is directly connected by plane and other means of transport with many cities in Europe.

Contacts. E-mail: europt2012@mii.vu.lt

Invited Speakers. Prof. Joaquim Joao Judice (University of Coimbra, Coimbra, Portugal) EUROPT Fellow 2012; Prof. Panos M. Pardalos (University of Florida, Gainesville, USA); Prof. Boris T. Polyak (Institute of Control Problems, Moscow, Russia); Prof. Adilson Xavier (University Federal Rio de Janeiro, Rio de Janeiro, Brasil).

# IMPORTANT DAYS

Deadline for abstract submission: April 30, 2012 Notification of acceptance: May 15, 2012 Early registration: May 25, 2012 Workshop: July 5-7, 2012

# EURO XXV Vilnius, Lithuania July 8-11, 2012

http://www.euro-2012.lt/welcome

### IMPORTANT DAYS

Deadline for abstract submission: February 29, 2012
Notification of acceptance: March 31, 2012
Deadline for early registration: April 22, 2012
Deadline for author registration: May 1, 2012

More information one can find in EUROPT Newsletter 25 from November 2011: http://www.iam.metu.edu.tr/EUROPT/Newsletter25-EUROPT.pdf

# Forthcoming Events

# • NONLINEAR ANALYSIS AND APPLICATIONS 2nd Conference of memory of corresponding member of National Academy of Science of Ukraine Valery S. Melnik Ukraine, Kyiv April 4-6, 2012

www.nonlinear.ssa.org.ua

Aims and scope. A second conference is dedicated to the memory of prematurely gone from the life in 2007 corresponding member of National Academy of Sciences of Ukraine, former chair of Department for applied nonlinear analysis at Institute for Applied Systems Analysis of National Technical University of Ukraine "Kyiv Polytechnic Institute" Valery Melnik. The subject of conference reflects the numerous scientific interests of Valery Melnik and is determined for either pure mathematicians or business administrators and decision making system developers to take part as well. Young scientists are invited also to participate in conference. The working languages of the conference are English, Russian, Ukrainian.

# Conference topics.

- 1. Nonlinear analysis and topology.
- 2. Differential-operator inclusions and variation inequalities.
- 3. Theoretical tasks of optimization.
- 4. The applied problems of optimization.
- 5. Decision-making theory.

- 6. Dynamic systems and attractors.
- 7. Mathematical models of the complex systems.
- 8. Application of optimization and modeling.
- 9. Modeling in sustainable development problems.
- 10. Young researchers section.
- 11. Computational neuroscience, biology, medicine.

**Venue.** National technical university of Ukraine "Kyiv Polytechnic Institute", Educational-scientific complex "Institute for applied system analysis", Building 35, Peremohy ave. 37, Kyiv, 03056, Ukraine.

# Contact information:

Organization committee e-mail: makalex@i.com.ua; Scientific secretary Professor Makarenko Alexander, Tel.: +38~044~406~85~30, e-mail: makalex51@gmail.com

Chairman: Zgurovsky Michael

# International program committee (preliminary):

- Weber Gerhard-Wilhelm (Turkey/Germany).
- Vladimirov Vsevolod (Poland)
- Guida M. professor (Italy)
- Tikigy-Hamburian R.A. (Russia/ USA).

National Program Committee: Andreev Mykola, Borisenko Serhii, Danilov Valerii, Ivanenko Viktor, Kapustian Volodymyr, Kapustian Oleksii, Kasyanov Pavel, Kogut Petro, Makarenko Alexander, Novikov Oleksii, Novickiy Viktor, Yatsenko Vitalii.

### Organizing committee:

- Makarenko Alexander, acting head of Department for applied nonlinear analysis of ESC "IASA", scientific secretary of the conference
- Pankratova Nataliia, deputy director for science of ESC "IASA"
- Romanenko Viktor, deputy director for studies of ESC "IASA"
- Andreev Mykola, ESC "IASA"
- Aksenova Tetiana, senior scientist ESC "IASA"/CEA
- Dudnikov Petro, senior scientist of ESC "IASA"
- Levkov Sergiy, ESC "IASA"/NJTI
- Kapustian Oleksii, Kyiv state university named by T.G. Shevchenko / NTUU "KPI"
- Kasyanov Pavlo, doctorant of ESC "IASA"

- Kirik Olena Ph.D., scientific secretary of ESC "IASA"
- Lushik Uliana, chair of department, Clinical hospital "Feofania"
- Mizernyi Viktor, associate professor of Vinnitsky national technical university of Ukraine
- Poveshenko Hennadii Ph.D., senior scientist of ESC "IASA"
- Yakovleva Alla Ph.D., head of the division of student affairs "IASA"
- Yasynskyi Vasyl, NTUU "KPI"
- Moreva Ol'ga, ESC "IASA"
- Patioha Alla,ESC "IASA"
- Samorodov Evhenii, ESC "IASA"
- Yefremov Kostiantyn, director of WDC for geoinformatics and sustainable development
- Melnik Ol'ga, ESC "IASA"/KNUU
- Zadoyanchuk Nina, ESC "IASA"/KNUU
- Kogut Ol'ga, ESC "IASA"/DNUU
- Krushynskyi Dmytro, ESC "IASA", member of SSA of ESC "IASA"
- Pasichny Alexis, ESC "IASA", head of Student science association (SSA) of NTUU "KPI"
- Pereverza Kateryna, ESC "IASA", deputy head of SSA of NTUU "KPI"
- Lazarenko Sergiy, ESC "IASA"
- Shmalko Roman, ESC "IASA",
- Vakulenko Alexander, ESC "IASA"
- Poveshenko Inga, ESC "IASA"
- Samorodova Julia, "Ukrinformproject"
- Statkevich Vitaliy, ESC "IASA"

### IMPORTANT DAYS

Abstract submission deadline: March 1, 2012 Abstracts review and program finalization: March 10, 2012

• The International Meeting on Applied Mathematics Errachidia, Marrocos April 23-27, 2012

https://sites.google.com/site/mpappliedmathematics2012/

Topics of the conference include (but are not limited to):

- Optimization and Variational Analysis

- Mathematical Systems Theory
- Ordinary and Partial Differential Equations
- Geometric Nonlinear Control and Applications
- Fractional Calculus and Applications
- Calculus on Time Scales and Applications

#### Scientific Commission

- Delfim F. M. Torres, University of Aveiro, Portugal delfim@ua.pt
- Boris Mordukhovich, Wayne State University, USA boris@math.wayne.edu
- Fátima Silva Leite, University of Coimbra, Portugal fleite@mat.uc.pt
- M. Benhamou, Moulay Ismail University, Morocco
- M. R. Sidi Ammi, Moulay Ismaïl University, Morocco sidiammi@ua.pt
- El Hassan El Kinani, Moulay Ismaïl University, Morocco elkinani\_67@yahoo.com
- Agnieszka B. Malinowska, BUT, Poland abmalinowska@ua.pt
- A. El Hachimi, Mohammed V University, Morocco aelhachi@yahoo.fr
- Saiida Lazaar, Morocco s.lazaar@gmail.com
- Mokhtar Kirane, France mokhtar.kirane@univ-lr.fr
- A. Faik, Moulay Ismaïl University, Morocco aicha.faik@lycos.com

# International Organizing committee:

- Delfim F. M. Torres, University of Aveiro, Portugal
- Agnieszka B. Malinowska, BUT, Poland CIDMA, Portugal
- M. R. Sidi Ammi, Moulay Ismaïl University, Morocco
- El Hassan El Kinani, Moulay Ismaïi l University, Morocco
- Cristiana J. Silva, University of Aveiro, Portugal cjoaosilva@ua.pt

# Local Organizing committee:

- M. Laayouni, Moulay Ismaïl University, Morocco
- L. Oukhtite-Moulay Ismaïl University, Morocco
- A. Taakili-Moulay Ismaïl University, Morocco
- M. Hajar-Moulay Ismaïl University, Morocco
- M. R. Sidi Ammi-Moulay Ismaïl University, Morocco
- E.H. El Kinani-Moulay Ismaïl University, Morocco
- Z. Hammouch, Moulay Ismaïl University, Morocco <a href="mailto:kakia@gmail.com">hammouch.zakia@gmail.com</a>
- M. Tilioua, Moulay Ismaïl University, Morocco <mouhcine.tilioua@gmail.com>
- M. Rahmoune, Moulay Ismaïl University, Morocco

#### IMPORTANT DAYS

Submission of abstracts papers: 20 January to 05 March 2012 Notification of acceptance: March 15, 2012 Submission of final papers: March 15-May 15, 2012

# • 50th meeting of Euro Working Group for Financial Modeling Rome, Italy May 3-5, 2012

**Topics.** As usually, the topics of the meeting cover many areas of financial modeling focusing on various subject areas within finance, topics including among others:

- Asset pricing,
- Financial forecasting,
- Banking,
- International finance,
- Behavioral finance,
- Corporate finance,
- Corporate governance,
- Portfolio management and optimization,
- Financial derivatives.
- Credit Risk and Risk management.

Costs. The cost of the meeting for each participant will be of 350 Euros and it includes the registration fee, lunches during the days of the conference and the social dinner. Scholars in the field and EWGFM members are kindly invited to submit their recent research papers to participate to the event.

**Submission.** Submissions are accepted by email ewgfm50@uniroma1.it in PDF, DOC, DOCX and TeX format.

Deadline for Submissions. March 15th 2012.

# • CORS/MOPGP2012

10th International Conference on Multiple Objective Programming and Goal Programming Niagara Falls, Canada June 11 - 13, 2012

http://web2.uwindsor.ca/cors-mopgp2012/cors2012.htm

Aims and scope. The 54th Annual conference of the Canadian Operational Research Society and the 10th International Conference on Multiple Objective Programming and Goal Programming (CORS/MOPGP2012 will be held in the wondrous city of Niagara Falls from June 11 to 13, 2012. The aim of this conference is to disseminate knowledge among the Operational Research and Multi-Criteria Decision Aid community. This conference is devoted to the recent theoretical and methodological developments, algorithmic developments, survey results, significant technical applications and case studies within the fields of Operational Research, Multi-Objective Programming and Goal Programming. This conference will provide a very good opportunity for researchers and

professionals to exchange their ideas, gain insight from real case studies, and enjoy the charm of Niagara Falls.

#### Committees.

- Chair-CORS: Elkafi Hassini, DeGroote School of Business, McMaster University
- Chair-MOPGP: Belaid Aouni, School of Commerce and Administration, Laurentian University
- Program Chair: Samir Elhedhli, Faculty of Engineering, University of Waterloo
- Local Organization Chair: Kenneth Klassen, Faculty of Business, Brock University
- Practice Chair: Oleksandr Romanko, Algorithmics/MITACS

# Invited speakers.

- CORS Plenary Speakers:

Saif Benjaafar, Distinguished McKnight University Professor Director, Industrial and Systems Engineering University of Minnesota, USA

George Nemhauser, Russell Chandler Ill Chair and Institute Professor School of Industrial and Systems Engineering Georgia Institute of Technology

- MOPGP Plenary Speaker:

Carlos Romero, Professor, Department of Forestry Economics and Management Forestry School Technical University of Madrid

#### IMPORTANT DAYS

Deadline for extended abstract submission: February 25, 2012 Notification of review reports: March 20, 2012

• Vehicle Routing and Logistics Optimization 2012 (First meeting of the EURO Working Group VeRoLog) Bologna, Italy June 18-20, 2012

# www.verolog.eu

Conference Venue. The conference will be hosted by the University of Bologna at the Faculty of Engineering, Viale Risorgimento, 2, Bologna, Italy.

**Abstract submission.** An extended abstract of 2–4 pages must be submitted to participate to the conference. Accepted abstract with a registered presenter will be included in the conference proceedings. At most one presentation per registered participant is accepted. All selected abstract will be presented within parallel session during the conference. A list of relevant topics for the conference will be available.

**Special Issues.** Selected high quality paper based on the presentation will be included in special issues of international journals edited after the conference.

# Programme Committee.

- Daniele Vigo, Univ. of Bologna, Italy (Chair)
- Marielle Christiansen, Univ.of Trondheim, Norway
- Angel Corberan, Univ.of Valencia, Spain
- Wout Dullaert, Univ. of Antwerp, Belgium
- Richard Eglese, Univ. of Lancaster, U.K.
- Geir Hasle, SINTEF, Norway
- Stefan Irnich, Univ. of Mainz, Germany
- Frederic Semet, Univ. of Lille, France
- Maria Grazia Speranza, Univ. of Brescia, Italy
- Paolo Toth, Univ. of Bologna, Italy

# Organizing Committee

- Paolo Toth, Univ. of Bologna, Italy
- Daniele Vigo, Univ. of Bologna, Italy

Contacts. ewg.verolog@gmail.com

# IMPORTANT DAYS

Deadline for abstract submission: February 15, 2012 Notification of acceptance: March 31, 2012 Deadline for early registration: April 30, 2012 Conference: September 13-15, 2012

• 5th Podlasie Conference on Mathematics Bialystok, Poland June 25-28, 2012

http://katmat.pb.bialystok.pl/pcm12/

Aims and skope. This is a satellite conference of the 6th European Congress of Mathematics (Krakow, July 2012). The conference will consist of Plenary Session and several Special Sessions. The Main Special Sessions concern the following areas: Algebra, Applications of Mathematics in Economy and Finance, Control Theory and Dynamical Systems, and Mathematical Foundations of Computer Science. Other special sessions may also be organized.

### Organizing and Scientific Commission

- Zbigniew Bartosiewicz chairman
- Czeslaw Baginski
- Ewa Girejko
- Anna Gomolinska
- Adam Grabowski
- Piotr Grzeszczuk
- Ryszard Mazurek
- Dorota Mozyrska
- Joanna Olbrys
- Ewa Roszkowska

# Invited speakers (confirmed)

- Jeffrey Bergen (DePaul University, Chicago, USA)
- Marek Druzdzel (University of Pittsburgh, USA)
- Boris S. Mordukhovich (Wayne State University, USA)
- Krzysztof M. Piasecki (Poznan University of Economics, Poland)
- Witold Respondek (INSA, Rouen, France)
- Agata Smoktunowicz (University of Edinburgh, United Kingdom)
- Tadeusz Trzaskalik (University of Economics in Katowice, Poland)

# IMPORTANT DAYS

Deadline for abstract submission: May 1, 2012 Notification of acceptance: May 15, 2012

# • ORP3 - Operation Research Peripatetic Postgraduate Programme

A EURO conference for young OR researchers Johannes Kepler University Linz, Austria July 16-20, 2012

# orp3.jku.at

Aims and Scope. ORP3 is the EURO peripatetic conference, each edition of which is hosted by a European university. It is organised (bi-)annually and is devoted to the Operational Research field in its broadest sense. Previous conferences have been held in Paris (2001), Lambrecht (2003), Valencia (2005), Guimarães (2007), Cadiz (2011). ORP3 aims at being a forum promoting scientific and social exchanges between the members of the future generation of Operations Research in academic research.

**Topics.** The conference is open to the whole scope of Operations Research, but the following topics are mostly welcome:

- Integer Programming and Combinatorial Optimization
- Discrete Optimization; graphs networks
- Supply Chain Management
- Cutting and Packing
- Machine and Project Scheduling
- Timetabling
- Production Planning and Lotsizing
- Transportation and Logisticst
- Stochastic Optimization
- Multiobjective Optimization
- Location Analysis
- Metaheuristic

**Programme.** The conference is composed only of plenary sessions and each participant will act as the chair and discussant of another session. In addition, the Scientific Program includes five keynote tutorials dedicated to specific issues whose speakers are internationally renowned experts-

# Keynote Tutorials.

- Tutorial I: Multiobjective Optimization Xavier Gandibleux, University of Nantes, France.
- Tutorial II: Heuristic Techniques for Stochastic Combinatorial Optimization Walter J. Gutjahr, University of Vienna, Austria.
- Tutorial III: Metaheuristics Richard F. Hartl, University of Vienna, Austria.
- Tutorial IV: Scheduling issues in vehicle routing Gilbert Laporte, CIRRELT, Montreal, Canada.
- Tutorial V: Models and Algorithms for Passenger Railway Optimization Problems -Paolo Toth, Professor in Operations Research - University of Bologna, Italy.

Conference Venue. The conference will be held at the Johannes Kepler University, Linz, Austria organized by the Institute of Production and Logistics Management. The conference will take place at the campus of the Johannes Kepler University Linz.

**Submission Requirements.** In order to attend ORP3 as a participant you must satisfy one of the following conditions:

- A young PhD student
- A young post doctoral OR researcher (maximum two years after completing your doctoral thesis at the deadline for submission)

The selection of participants is made by the scientific committee on the basis of full paper submissions of publishable quality in an international OR journal. Co-authored papers are acceptable as long as they are presented by a participant satisfying the aforementioned requirements.

The paper submission may be in a PDF or Postscript format sent to: orp3@jku.at.

#### IMPORTANT DAYS

Deadline for abstract submission: February 28, 2012 Notification of acceptance: April 30, 2012 Deadline for registration: May 15, 2012

• IX Brazilian Workshop on Continuous Optimization Luis Correia, Piaui, Brazil July 29 to August 4, 2012

www.impa.br/opencms/pt/eventos/store/evento<sub>1</sub>202

### THIRD ANNOUNCEMENT

#### Basic information.

The IX Brazilian Workshop on Continuous Optimization will take place at the beach of Luis Correia, in the state of Piaui, northeast of Brazil, from July 29 to August 4, 2012. Subjects to be discussed encompass theoretical, computational and implementation issues, in both linear and non-linear programming, including variational inequalities, complementarity problems, nonsmooth optimization, vector optimization, generalized equations, optimization in manifolds, etc.

The backbone of the workshop will consist of plenary lectures, offered by invited speakers, of 45 minutes each. There will be also a limited number of contributed talks, of 25 minutes each. Those interested in contributing a talk should send an abstract, either by regular or electronic mail, to the addresses below, no later than February 28, 2012. Acceptation of the contributed talks will be informed no later than March 31, 2012.

# Plenary speakers.

- John Birge (University of Chicago, USA)
- Roberto Cominetti (Universidad de Chile)
- Clovis Gonzaga (Universidade Federal de Santa Catarina, Brazil)
- Alfredo Iusem (Instituto de Matemática Pura e Aplicada, Brazil)
- José Mario Martínez (Universidade Estadual de Campinas, Brazil)
- Boris Mordukhovich (Wayne State University, USA)
- Liqun Qi (Hong Kong Polytechnic University, China)
- Simeon Reich (Israel Institute of Technology, Israel)
- Claudia Sagastizábal (Electric Energy Research Center, Brazil)

- Mikhail Solodov (Instituto de Matemática Pura e Aplicada, Brazil)
- Benar Fux Svaiter (Instituto de Matemática Pura e Aplicada, Brazil)
- Richard Tapia (Rice University, USA)
- Yinyu Ye (Stanford University, USA)

### Scientific Committee.

- Alfredo Iusem (IMPA)
- Benar Fux Svaiter (IMPA)
- Clovis Gonzaga (UFSC)
- João Xavier da Cruz Neto (UFPI)
- José Mario Martínez (UNICAMP)
- Mikhail Solodov (IMPA)

# Organizing Committee.

- Alfredo Iusem (IMPA)
- Gilvan Lima de Oliveira (UFPI)
- Jurandir de Oliveira Lopes (UFPI)
- João Xavier da Cruz Neto (UFPI)
- Marcos Vinício Travaglia (UFPI)
- Newton Luis Santos (UFPI)
- Paulo Sérgio Marques dos Santos (UFPI)
- Sissy da Silva Souza (UFPI)

Contacts. Departamento de Matemática, Centro de Ciências da Natureza, SG 4, Universidade Federal do Piauí, Campus Ministro Petrônio Portella - Ininga Teresina, PI, CEP 64049-550, Brasil, Fax (55)(86) 3215-5835

e-mail address: brazopt2012@optim-pi.mat.br

# IMPORTANT DAYS

Deadline for abstract submission: February 28, 2012 Notification of acceptance: March 31, 2012 Deadline for early registration: April 15, 2012 Workshop: July 29 to August 4, 2012

# • MOPTA 2012

# Modeling and OPtimization: Theory and Applications Lehigh University, Bethlehem, USA July 30-August 1, 2012

http://coral.ie.lehigh.edu/ mopta/

**Aims and scope** MOPTA aims at bringing together a diverse group of people from both discrete and continuous optimization, working on both theoretical and applied aspects. There will be a small number of invited talks from distinguished speakers and contributed talks, spread over three days.

Our target is to present a diverse set of exciting new developments from different optimization areas while at the same time providing a setting which will allow increased interaction among the participants. We aim to bring together researchers from both the theoretical and applied communities who do not usually have the chance to interact in the framework of a medium-scale event.

# Confirmed Plenary Speakers.

- Kurt M. Anstreicher (U. of Iowa)
- Edgar Blanco (MIT)
- Andrew V. Goldberg (Microsoft Research)
- Mark S. Roberts (U. of Pittsburgh)
- Michael Trick (Carnegie Mellon U.)
- Santosh S. Vempala (Georgia Tech)
- Henry Wolkowicz (U. of Waterloo)
- Stephen J. Wright (U. of Wisconsin-Madison)

# Confirmed Invited Sessions.

- Miguel F. Anjos (Polytechnique Montréal): Optimization for the Smart Grid
- Turgay Ayer (Georgia Tech): Healthcare Management
- Hande Benson (Drexel U.): Interior-Point Methods
- Samuel A. Burer (U. of Iowa): Conic Programming
- Frank E. Curtis (Lehigh U.): Nonlinear Optimization
- Peter I. Frazier (Cornell U.): Stochastic Optimization/Statistical Learning
- Willem-Jan van Hoeve (Carnegie Mellon U.): Constraint Programming
- Miguel Lejeune (George Washington U.): Financial Optimization/Engineering
- Yanjun Li (Purdue U.): Integer Programming/Combinatorics
- Fatma Kilinç-Karzan (Carnegie Mellon U.): Compressed Sensing/Robust Optimization
- Javier Peña (Carnegie Mellon U.): First Order Methods Complexity

- Eugene Perevalov (Lehigh U.): Optimization, Information and Complexity

### Contact.

- Questions about the plenaries, program, and/or abstracts: Luis Zuluaga, inmopta@lehigh.edu
- Questions about the competition: Frank E. Curtis, frank.e.curtis@lehigh.edu
- Questions about registration, travel, and/or accommodations: Kathy G. Rambo, kgr0@lehigh.edu, Amanda Fabrizio, amanda.Fabrizio@lehigh.edu
- Mailing address, phone, fax, etc.: Department of Industrial and Systems Engineering, Lehigh University, 200 W. Packer Ave. Bethlehem PA 18015, Phone: 610-758-4050, Fax: 610-758-4886

# IMPORTANT DAYS

Competition Submission: May 31, 2012 Abstract Submission (early): May 31, 2012 Abstract Submission (late): June 30, 2012 Workshop: July 29 to August 4, 2012

# • DEA 2012

# 10th International Conference on Data Envelopment Analysis Natal, Brazil August 27-30, 2012

www.DEAsociety.org/dea2012

General Information. The organizers of the 10th International Conference on Data Envelopment Analysis (DEA2012) have the great pleasure of inviting you to participate in the DEA2012 Conference, now scheduled on August 27-30, 2012 at the 5-star Pestana Resort Hotel in the beautiful beach city of Natal, Brazil. Special travel and hotel rates have been negotiated to make the conference trip budget friendly.

DEA2012 plans to bring together researchers and practitioners interested in the development of the DEA methodology and its applications to performance management in both public and private sectors. Theoretical and empirical papers on DEA and related fields in efficiency and productivity analysis are also invited. We specially welcome papers on Energy and Regulation and on Health Performance Management, two special themes for the Conference. DEA2012 will also feature several panel discussions and presentations on DEA in practice related to these themes.

Natal is the fastest growing tourist destination in Brazil located in its north-east corner closest to Europe and Africa. Natal is known for its natural beauty and breath-taking beaches, and its popular Brazilian dances and Carnatal celebrations. Visitors can go on a buggy ride over 30-foot sand dunes or go diving and snorkeling near dolphin beaches, when they are not admiring the 16th century naval fortress and Portuguese colonial style architecture in the city.

# Organizing Committee.

- Ana Lúcia Miranda Lopes, Brazil
- Mariana Rodrigues de Almeida, Brazil
- Rajiv Banker, USA
- Ali Emrouznejad, UK

Conference Scientific Committee. Adler, Nicole (Israel), Agrell, Per (Belgium), Amirteimoori, Alireza (Iran), Avkiran, Necmi (Australia), Bal, Hasan (Turkey), Banker, Rajiv (USA), Bogetoft, Peter (Denmark), Camanho, Ana (Portugal), Chilingerian, Jon A. (USA), Dash Wu, Desheng (Canada), de Almeida, Mariana (Brazil), De Witte, Kristof (Belgium), Despotis, Dimitris (Greece), Emrouznejad, Ali (UK), Fethi, Meryem D. (UK), Forsund, Finn (Norway), Fukuyama, Hirofumi (Japan), Gattoufi, Said (Oman), Georgiou, Andreas (Greece), Gomes, Adriano Provezano (Brazil), Grosskopf, Shawna (USA), Hollingsworth, Bruce (Australia), Hsihui, Chang (USA), Johnson, Andy (USA), Kao, Chiang (Taiwan), Karagiannis, Giannis (Greece), Krivonozhko, Vladimir (Russia), Kuosmanen, Timo (Finland), Liu, Wenbin (UK), Lopes, Ana Lúcia Miranda (Brazil), Marinho, Alexandre (Brazil), Marques, Rui Cunha (Portugal), Neralic, Luka (Croatia), Olesen, Ole (Denmark), Osman, Ibrahim H. (Lebenan), Paradi, Joseph C. (Canada), PAUL, John (Singapore), Podinovski, Victor (UK), Portela, Maria C.A. Silva (Portugal), Ramirez-Valdivia, Martha (Chile), Ray, Subhash V. (USA), Ruggeiro, John (USA), Seiford, Lawrence M. (USA), Sherman, David (USA), Sickles, Robin C. (USA), Souza, Geraldo da Silva e (Brazil), Thanassoulis, Emmanuel (UK), Vargas, Francisco (Mexico), Vincent, Charles (Peru), Zhu, Joe (USA)

# Contact Details.

- Special Inquiries: DEA2012info@DEAsociety.org

- Academic Issues: DEA2012@DEAsociety.org

# IMPORTANT DAYS

Abstract Submission: March 1, 2012 Notification/Acceptance: March 31, 2012 Deadline for early registration: May 15, 2012 Workshop: July 29 to August 4, 2012

# • ECIT

# European Conference on Iteration Theory Ponta Delgada, São Miguel Island, Azores, Portugal September 9-15, 2012

http://www.ecit2012.uac.pt/

Topics. The main topic of European Conference on Iteration Theory is iteration theory. This theory is a branch of mathematics and includes topics related to discrete dynamical systems and functional equations. The aim of these theoretical studies is to model, analyze and understand iterative process, for example, systems with discrete time. Such systems can be obtained from many different fields of application: engineering (control theory, electronics ...), physics, mechanics, economics, biology, ecology, ... All these questions have given rise to the introduction and the development of several branches of mathematics, related with the iteration theory, as, for instance: Theory of singularities; Bifurcation theory; · Dynamical systems with small perturbations; Topological dynamics; Ergodic theory; Symbolic dynamics; Embedding problems; Iteration theory, in particular also iteration groups and semi-groups; Iterative and linear functional equations

Scientific Committee. Balibrea F. (Murcia), Förg-Rob W. (Innsbruck), Fournier-Prunaret D. (Toulouse), Gardini L. (Urbino), Gronau D. (Graz), Paganoni L. (Milano), Severino R. (Lisboa), Sharkovsky A. (Kyiv), Smital J. (Opava), Jarczyk W. (Zielona Góra), Zdun M.C. (Kraków)

Honorary members of the Scientific Comitee: Mira C. (Toulouse) and Reich L. (Graz)

**Organizations.** CMATI, Centro de Matemática Aplicada e Tecnologias da Informação da Universidade dos Açores (Center of Applied Mathematics and Information Tecnologies, Azores University); DM-UAc, Departamento de Matemática da Universidade dos Açores (Maths Department of Azores University)

Local Organizing Committee. João Cabral (Chair) CMATI, Helena Melo CMATI, Jerónimo Nunes CMATI, Maria do Carmo Martins CMATI, Paulo Medeiros DM-UAc

### IMPORTANT DAYS

First subscription: February 10, 2012 Final subscription and payment: April 30, 2012

# • Mini EURO Conference on Computational Biology Bioinformatics and Medicine Nottingham, UK September 13-15, 2012

http://ima.ac.uk/cbbm2012

Objective of the Mini EURO Conference. The Mini EURO Conference is organized by the EURO Working Group on Operational Research in Computational Biology, Bioinformatics and Medicine (EWG-CBBM). The objective of the conference is to bring together researchers developing and using computational methods to solve problems in computational biology, bioinformatics and medicine.

Areas of Interest. The organisers welcome researchers from different backgrounds addressing challenging problems in computational biology, bioinformatics and medicine, including (but not limited to): biomolecular sequence analysis, comparative genomics, modelling and prediction of gene patterns, microarray informatics, protein structure prediction, genetic networks, analysis of genetic variations, systems biology, gene classification, docking and drug design, modeling and analysis of metabolic networks, analysis methods for biomedical data, optimisation and machine learning techniques in biomedical problems, OR applications in biology, bioinformatics and medicine.

**Invited Speakers.** Three speakers, to be confirmed. Invited Speakers will be internationally recognized research leaders in the field, selected to represent a broad range of interests across the field.

**Venue.** Jubilee Campus, University of Nottingham, Wollaton Road, Nottingham, UK, NG8 1BB

**Abstract Submission.** Abstracts of no longer than 500 words will be accepted until May 2012.

# Organising Committee.

- Jon Garibaldi (University of Nottingham)
- Jacek Blazewicz (Institute of Computing Science, Poznan University of Technology)
- Ceyda Oguz (Koç University)
- Metin Turkay (Koç University)
- Paola Bertolazzi (Istituto di Analisi dei Sistemi ed Informatica "Antonio Ruberti")
- Uwe Aickelin (University of Nottingham)
- Giovanni Felici (Istituto di Analisi dei Sistemi ed Informatica
- Gerhard Wilhelm Weber (Institute of Applied Mathematics, METU)
- Marta Szachniuk (Institute of Computing Science, Poznan University of Technology)

Organising groups. EURO Working Group on OR in Computational Biology, Bioinformatics and Medicine Association of European OR Societies, The University of Nottingham Intelligent Modelling and Analysis Research Group, Koç University, Institute of Computing Science Poznan University of Technology, Institute of Applied Mathematics, METU, Istituto di Analisi dei Sistemi ed Informatica, "Antonio Ruberti"- CNR, EUROPT-the Continuous Optimization Working Group of EURO

### IMPORTANT DAYS

Deadline for abstract submission: May, 2012 Notification of acceptance/ Preliminary program available: June, 2012 Deadline for early registration: July, 2012 Conference: September 13-15, 2012

# • OPTIMA 2012

# III International conference Optimization and applications Costa de Caparica, Portugal September 23-30, 2012

http://www.cima.uevora.pt/optima 2012/

Conference Venue. Hotel Costa da Caparica, Av. General Humberto Delgado, 47, Costa da Caparica, Portugal, www.hotelcostacaparica.pt

**Topics.** Mathematical Programming, Global Optimization, Nondifferential Optimization, Integer Programming, Combinatorial Optimization, Multicriterial Optimization, Equilibrium Programming, Game Theory, Optimal Control, Applications of Optimization in Natural Sciences, Engineering, Economics, Biology, Medicine, etc.

# Organizing Committee.

- Vladimir Bushenkov, *Chair*, University of Evora (Portugal)
- Yury G. Evtushenko, *Chair*, Dorodnicyn Computing Center of RAS (Russia)
- Alexander P. Afanasiev, Institute for System Analysis of RAS (Russia)
- Anatoly S. Antipin, Dorodnicyn Computing Center of RAS (Russia)
- Oleg Burdakov, Linköping University (Sweden)
- Vladimir A. Garanzha, Dorodnicyn Computing Center of RAS (Russia)
- Alexander I. Golikov, Dorodnicyn Computing Center of RAS (Russia)
- Vladimir Goncharov, University of Evora (Portugal)
- Alexander Yu. Gornov, Institute System Dynamics and Control Theory, SB of RAS (Russia)
- Miloica Jacimovic, Montenegrin Academy of Sciences and Arts (Montenegro)
- Alexander V. Lotov, Dorodnicyn Computing Center of RAS (Russia)

- Yuri Nesterov, CORE Université Catholique de Louvain (Belgium)
- Vera Roshchina, University of Evora (Portugal)
- Yaroslav D. Sergeyev, University of Calabria, University of Nizhni Novgorod (Italy, Russia)
- Gueorgui Smirnov, University of Minho (Portugal)
- Tatiana Tchemisova, University of Aveiro (Portugal)
- Ivetta A. Zonn, Dorodnicyn Computing Center of RAS (Russia)
- Vladimir I. Zubov, Dorodnicyn Computing Center RAS (Russia)

#### IMPORTANT DAYS

Deadline for abstract submission: April 30, 2012 Notification of acceptance/ Preliminary program available: May 20, 2012

• International Conference on Applied and Computational Mathematics (ICACM) Ankara, Turkey October 3 - 6, 2012

http://icacm.iam.metu.edu.tr/

General information. It is our great pleasure to inform you that as the Institute of Applied Mathematics (IAM) at the Middle East Technical University (METU), we are organizing an International Conference on Applied and Computational Mathematics (ICACM) on the occasion of the 10th Anniversary of the Foundation of IAM. The conference will be held at the METU Campus, in Ankara, Turkey between October 3-6, 2012.

The conference (ICACM) will highlight the recent advances in applied and computational mathematics and demonstrate their applicability to science, engineering as well as industry. In addition to the existing traditional strong focus on applied and computational mathematics, the special emphasis will be given to Cryptology, Coding Theory, Financial and Actuarial Mathematics, and Scientific Computing as well as related theory and applications.

Celebrating the 10th anniversary of our institute (IAM) with your precious contribution to ICACM is very much appreciated

Topics and themes focused covered at ICACM will include, but not limited to Cryptology, Information Security, Public Key Infrastructure, Coding Theory, Finite Fields and their Applications, Numerical Methods in Science and Engineering, Optimisation, Control and Combinatorics, Computational Methods for Differential Equations, Mathematics and Computation in Biological Sciences and Medicine, Linear and Nonlinear Dynamics, Asset Pricing, Portfolio Optimization, Hedging and Risk Management, Financial Economics and Econometrics, Stochastic Differential Equations, Monte Carlo Methods, Applied Probability and Statistics, Mathematical and Computational Finance, Actuarial

Modelling, Life and Health Insurance, Non-Life Insurance, Risk Management, Insurance Finance and Marketing, Reinsurance, Reserving in Life and Non-Life Insurance.

**Publications.** Note that the papers presented in the Conference will be published in the Journal of Computational and Applied Mathematics (JCAM), provided that they fulfil the journal's requirements.

# Organising Committee.

- Sedat Akleylek (Ondokuz Mayis University, Turkey)
- Ersan Akyildiz (Middle East Technical University, Turkey), Chair
- Isil Erol (Middle East Technical University, Turkey)
- Bülent Karasözen (Middle East Technical University, Turkey)
- Sevtap Selçuk-Kestel (Middle East Technical University, Turkey)
- Ferruh Özbudak (Middle East Technical University, Turkey)
- Ömür Ugur (Middle East Technical University, Turkey)

Scientific Program Committee: Sedat Akleylek (Ondokuz Mayis University, Turkey), Ersan Akyildiz (Middle East Technical University, Turkey), Sumru Altug (Koç University, Turkey), B. Burçak Basbug-Erkan (Middle East Technical University, Turkey), S. Ilker Birbil (Sabanci University, Turkey), Serdar Boztas (RMIT University, Australia), Tolga Can (Middle East Technical University, Turkey), Murat Cenk (University of Waterloo, Canada), Ali Doganaksoy (Middle East Technical University, Turkey), Isil Erol (Middle East Technical University, Turkey), Omer L. Gebizlioglu (Ankara University, Turkey), Refik Güllü (Bogaziçi University, Turkey), İsmail Güloglu (Dogus University, Turkey), Azize Hayfavi (Middle East Technical University, Turkey), Orhun Kara (TUBITAK UEKAE, Turkey), Bülent Karasözen (Middle East Technical University, Turkey), Rafail Kasimbeyli (Izmir University of Economics, Turkey), Songül Kaya Merdan (Middle East Technical University, Turkey), Abdul Q. M. Khaliq (Middle Tennessee State University, USA), Çetin Kaya Koç (University of California Santa Barbara, USA), Gülser Köksal (Middle East Technical University, Turkey), Hakan Öktem (Middle East Technical University, Turkey), Giray Okten (Florida State University, USA), Ferruh Ozbudak (Middle East Technical University, Turkey), Suna Özyüksel (Turkish Insurance Institute, Turkey), Mustafa Pinar (Bilkent University, Turkey), Vilda Purutçuoglu (Middle East Technical University, Turkey), Burak Saltoglu (Bogaziçi University, Turkey), Serdar Sayan (TOBB University of Economics and Technology), Ali Aydin Selçuk (Bilkent University, Turkey), Sevtap Selçuk Kestel (Middle East Technical University, Turkey), Ali Devin Sezer (Middle East Technical University, Turkey), Koray D. Simsek (Sabanci University, Turkey), Fatih Tank (Ankara University, Turkey), Münevver Tezer (Middle East Technical University, Turkey), Metin Türkay (Koç University, Turkey), Ömür Ugur (Middle East Technical University, Turkey), Ilkay Ulusoy (Middle East Technical University, Turkey), Gazanfer Unal (Yeditepe University, Turkey), Gerhard-Wilhelm Weber (Middle East Technical University, Turkey), Kasirga Yildirak (Trakya University, Turkey), Kamil Yilmaz (Koç University, Turkey), Yeliz Yolcu Okur (Middle East Technical University, Turkey), Melek Yücel (Middle East Technical University, Turkey)

# Plenary talks.

- Peter Deuflhard, Professor at Freie Universität Berlin Institut für Mathematik Numerical Analysis / Scientific Computing
- Avner Friedman, Distinguished University Professor Director, Mathematical Biosciences Institute The Ohio State University

Invited speakers. M. J. Goovaerts (Belgium), G. McGuire (Ireland), F. Heß (Germany), M. Jeanblanc (France), J. Jost (Germany), R. Korn (Germany), K. Kunisch (Austria), B. Øksendal (Norway), K. M. Ostarzewski (USA), M. Pontier (France), B. Preneel (Belgium), H. M. Soner (Switzerland), M.G. Speranza (Italy).

#### IMPORTANT DAYS

Online registration and (extended) abstract submission opens: October 2011
Submission deadline - contributed (extended) abstracts: March 30, 2012
Notification to authors: June 1, 2012
Early registration deadline: June 29, 2012

# **Awards and Competitions**

# • Decision Analysis Practice Award

General information. The Practice Award is given annually to the best decision analysis application, as judged by a panel of Society members. The Decision Analysis Society invites member submissions for the 2012 Decision Analysis Practice Award offered by the one-thousand-member-strong INFORMS Decision Analysis Society.

**Submission.** Submitters are responsible for obtaining any company or agency clearances necessary to allow presentation of the work. Aspects of the application or results may be disguised as necessary to preserve confidentiality, provided that the material that is disclosed is sufficient to allow evaluation of the work. We encourage co-authored submissions where appropriate. The submissions should use the attached format and be submitted by 31 May 2012. The summary should be about two pages long. Once you submit your work,

- 1. The Practice Award committee will evaluate all submissions in the summer and name three finalists.
- 2. At the 2012 INFORMS meeting on October 14-17, 2012, Phoenix Convention Center, Phoenix, AZ, there will be a special DAS sponsored Practice Award session in which the three finalists present their results to the award committee and interested attendees at the conference.
- 3. The Practice Award committee will then determine the winner of the practice prize using six criteria: importance of the problem, impact on the client's decision making, benefits to the client organization, use of decision analysis tools, quality of the analysis, and originality.

**The prize.** The prize is \$750, a plaque from the Decision Analysis Society and publicity (consistent with your proprietary restrictions.) Submissions based on previously published work are also eligible for the prize.

**Information.** For more information on the prize and a list of past winners, see <a href="http://www.informs.org/Recognize-Excellence/Community-Prizes-and-Awards/Decision-Analysis-Society/DAS-Practice-Award">http://www.informs.org/Recognize-Excellence/Community-Prizes-and-Awards/Decision-Analysis-Society/DAS-Practice-Award</a>

For more information on the conference at which the practice competition will be conducted, see <a href="http://meetings2.informs.org/phoenix2012/">http://meetings2.informs.org/phoenix2012/</a>

Contacts. Please send submissions and any questions to Greg Parnell, the Chair of the 2012 Decision Analysis Practice Award Committee, 2354 Fairchild Drive, Suite 6H120, USAF Academy, CO 80840

Tel.: Office: 719-333-4189, Cell: 914-720-3989, Fax: 719-333-9715

e.mail: greg.parnell@gmail.com

# • 4th AIMMS/MOPTA International Optimization Modeling Competition

http://coral.ie.lehigh.edu/ mopta/competition

**General information.** The competition is jointly organized by the conference organizers of MOPTA and Paragon Decision Technology (http://www.aimms.com). Finalists are expected to attend and present their results at the 2012 MOPTA Conference to be held July 30-August 1, 2012 at Lehigh University, Bethlehem, PA, USA

Teams of at most three students can participate. The team leader has to be a graduate student, though the other members of the team can be advanced undergraduate students. Each member of the team must be registered as a full-time student at a recognized educational institution during the Spring term of the 2011-2012 academic year. Students with a background in optimization, regardless of their actual field of study, are eligible. Collaboration between students from different departments is strongly encouraged. Each team must declare a team advisor with which the team may consult about the problem and their solution. It is the team advisor?s responsibility to ensure that the students have appropriate knowledge for the competition. The team advisor should not be involved as a participant in the solution process.

As the conference is international, so is the competition. Teams from all over the world can participate, as long as at least one team member can come to the conference, should the team make it to the final round. The official language of the competition is English.

The competition problem has been posted; please visit:

http://coral.ie.lehigh.edu/ mopta/competition for a description of the problem and further details.

All teams must register for the competition in order to participate.

Contacts: Frank E. Curtis, frank.e.curtis@lehigh.edu

### IMPORTANT DAYS

Registration Due: October 2011 Solutions Due: May 31, 2012 Finalists Chosen: June 21, 2012 Conference Begins: July 30, 2012

# Journals and Special Issues

• International Journal of Energy Optimization and Engineering (IGI-GLOBAL COM/IJEOE 1-866-342-6657)

Editor(s)-in-Chief: Pandian Vasant (Petronas University of Technology, Malaysia)

**Submission information.** Prospective authors should note that only original and previously unpublished articles will be considered. Interested authors must consult the journals guidelines for manuscript submissions at www.igi-global. com prior to submission. All article submissions will be forwarded to the Editorial Review Board for double-blind, peer review.

All submissions and inquiries should be directed to the attention of Prof. Pandian Vasant, eic.ijeoe@gmail.com

Coverage. IJEOE publishes global research in the areas of energy optimization and engineering. The journal provides relevant theoretical frameworks and the latest empirical research findings in the areas of electrical power engineering, control systems, and hybrid intelligent optimization. This interdisciplinary journal examines and encourages research within energy optimization and engineering fields, including

- fuzzy logic,
- neural networks,
- evolutionary algorithms,
- genetic with line or pattern search,
- particle swam optimization,
- ant colony optimization,
- hybrid system optimization in a variety of engineering, science, business,
- hybrid energy resource applications.

# • EURO Journal on Transportation and Logistics

# CALL FOR TUTORIALS

The field of Transportation and Logistics relies more and more on advanced methodological tools. Researchers must master a wide variety of complex methods and theories. In order to support the research community, the EURO Journal on Transportation and Logistics will publish tutorials.

The objective is to publish material that has reached a level of maturity in the research community, so that it interests a wide audience, but did not make its way to standard textbooks yet. To be acceptable for publication, the topic of the tutorial should not be available in an existing textbook. Also, the tutorial should include concrete and reproducible examples, and should be written in a pedagogical way. All tutorials will be subject to peer review before publication.

We invite lecturers and researchers to submit tutorials to the journal. Manuscript can be submitted online using the editorial manager <a href="http://www.editorialmanager.com/ejtl/">http://www.editorialmanager.com/ejtl/</a>

**Contacts.** Michel Bierlaire, Editor-in-Chief, EURO Journal on Transportation and Logistics michel.bierlaire@epfl.ch

# • International Journal INVERSE PROBLEMS IN SCIENCE AND ENGINEERING

Special Issue dedicated to contributions presented at EngOpt 2012.

Editor in Chief: Professor George S Dulikravich.

**Journal Site:** http://www.tandf.co.uk/journals/titles/17415977.asp

Guest Editors of the Special issue: Prof. George S Dulikravich, Prof. Helcio Or-

lande, and Prof. Marcelo Colaco

# • International Journal MECHANICS OF ADVANCED MATERIALS AND STRUCTURES

Special Issue on Optimization of Advanced Materials and Structures dedicated to contributions presented at EngOpt 2012.

Editor-in-Chief: Professor J. N. Reddy

Journal site: http://www.tandf.co.uk/journals/titles/15376494.asp

Guest Editors: Prof. Aurelio.L. Araujo (aurelio.araujo@ist.utl.pt), Prof. Cristovao. M. Mota Soares (cristovao.mota.soares@ist.utl.pt), Prof. Jan. Blachut (em20@liverpool.ac.uk)

# **Books**

• Stochastic Optimal Control and the U.S. Financial Debt Crisis, (Springer Science, 2012) by Jerome L. Stein

#### Contents.

- 1. Introduction/preface
- 2. Failure of the Fed, IMF, academic profession to anticipate the crisis, disregarded warnings
- 3. Failure of the Quants, mathematical finance models
- 4. Philosophy of Stochastic optimal control approach, relation to M-V analysis; Sensitivity of optimal debt and risk to alternative stochastic processes, Early Warning Signals
- 5. Application of Stochastic Optimal Control to Financial crisis 2007-08
- 6. AIG in the crisis
- 7. Crises in the 1980s: Agricultural, SL
- 8. Diversity of debt crises in Euro

Description: Stochastic Optimal Control (SOC)-a mathematical theory concerned with minimizing a cost (or maximizing a payout) pertaining to a controlled process under uncertainty-has proven incredibly helpful to understanding and predicting debt crises and evaluating proposed financial regulation and risk management. Stochastic Optimal Control and the U.S. Financial Debt Crisis analyzes SOC in relation to the 2008 U.S. financial crisis, and offers a detailed framework depicting why such a methodology is best suited for reducing financial risk and addressing key regulatory issues. Topics discussed include the inadequacies of the current approaches underlying financial regulations, the use of SOC to explain debt crises and superiority over existing approaches to regulation, and the domestic and international applications of SOC to financial crises. Principles in this book will appeal to economists, mathematicians, and researchers interested in the U.S. financial debt crisis and optimal risk management.

The theme of the book is that the application of Stochastic Optimal Control (SOC) is very helpful in understanding and predicting debt crises. The mathematical analysis is applied empirically to the financial debt crisis of 2008 and the crises of the 1980s, and concludes with an analysis of the European debt crisis. I use SOC to derive a theoretically founded quantitative measure of an optimal, and an excessive leverage/debt/risk that increases the probability of a crisis. The optimal leverage balances risk against expected growth. The environment is stochastic: the capital gain, productivity of capital and interest rate are stochastic variables, and for an insurance company, such as AIG, the claims are also stochastic. I associate the housing price bubble with the growth of household debt. A bubble is dangerous insofar as it induces a non-sustainable debt. This danger is exacerbated insofar as a complex financial system is based upon it.

**The author:** Jerome L. Stein has been an emeritus professor of economics at Brown University since 1993, Visiting Professor/Research Applied Mathematics Brown University since 1997. He is the author of nine research monographs, and has published over

100 journal articles in such leading publications as American Economic Review, Review of Economics and Statistics, and Journal of banking and Finance, Contemporary Mathematics. He has served on the editorial boards of the Journal of Finance, American Economic Review, Journal of International and Comparative Economics, and the Journal of Banking and Finance.

You may browse a couple of chapters at http://www.dam.brown.edu/people/stein.htm

# Editor's Notes

Dear members of EUROPT, this issue of EUROPT Newsletter includes several announcements for the forthcoming events, information about new journals and books that can be of interest of many of us. Notice that the deadline for some of events is the end of February.

This month two good news are connected with Portuguese EUROPT members. The first one is that Professor Joaquim Judice from Coimbra University was nominated the EUROPT Fellow 2012. I congratulate professor with this nomination and invite all EUROPT members to assist the Award ceremony and the EUROPT Fellow Plenary talk in the workshop in Shiauliai. The second news is that professor Domingos Cardoso from Aveiro University, the previous Newsletter Editor and the active EUROPT member, was recently elected the President of APDIO - Portuguese Association of Operations Research. I wish professor Domingos Cardoso many success and new achievement in his work and everything the best in his life.

As it is mentioned in the introductional Word from the Chair, during the EUROPT Workshop 2012 in Shiauliai, the new Managing Board will be announced. It means that the new Newsletter Editorial Board will also start its work in July 2012. I would like to ask the EUROPT members who want to contribute with their work and new ideas to propose themselves for the EUROPT Editorial Board, as well as to make suggestions about possibly new format of the Newsletters. It is important to have more versatile type of contents of the Newsletter, to encourage EUROPT members to share news on research achievements or describe research groups etc., so all the suggestions how we can improve our Newsletters are welcome.

Finally, I would like to thank everybody who contributed with the information for this issue. My especial thanks to our chair, Kaisa Miettinen for her constant attention and friendly support. Please notice that the next issue of the Newsletter is planned for the end of April. Please send us all suggested information and news by April 15, 2012.

On behalf of the Editorial Board

Tatiana Tchemisova tatiana@ua.pt

**Editorial Board:** Tatiana Tchemisova, János D. Pintér, Gerhard-Wilhelm Weber

**Technical support:** Semih Kuter, Koksal Yucesoy, Aysun Tesel